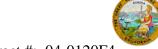
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003965 Address: 333 Burma Road **Date Inspected:** 10-Sep-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Wu Ming Kai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 Tower **Bridge No: Component:** 

### **Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

#### OBG Bay 4:

The QA Inspector was requested by ZPMC QC, to observe Magnetic Particle Testing (MT) of all welds on 33M North Tower Diaphragm Assembly SA322/SA276. The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technician Cai Xin Xin utilizing the MT Method to examine 100% of the cover pass of the welds attaching the web plates to 33M North Top Tower Diaphragm SA322 at Weld Joint (WJ) Numbers NSD1-SA322B/B-3, 4, 7, 8, 11, 12, 15 and 16; and the web to web WJ's on 33M North Tower Diaphragm SA322/276. There were 5 initial indications found which were removed by grinding. Those areas were again examined with MT by Mr. Cai. Upon re-examination with MT by Mr. Cai, all the above listed welds appeared to have no indications and were accepted. The welds attaching the web plates to the upper Tower Diaphragm SA322 and the welds attaching Flange Plate Assemblies SA272 and SA275 to the 33M top and bottom tower diaphragms were not examined at this time. The QA Inspector randomly observed that a repair needed to be performed in the fillet weld attaching Flange Plate Assembly SA275 to 33M Bottom Tower Diaphragm SA276, WJ NSD1-SA276-8. The attached photographs provide additional detail.

The QA Inspector randomly performed a 10% MT final verification of the cover pass of the welds attaching the web plates to 33M North Top Tower Diaphragm SA322 at Weld Joint (WJ) Numbers NSD1-SA322B/B-3, 4, 7, 8, 11, 12, 15 and 16; and the web to web WJ's on 33M North Tower Diaphragm SA322/276. There appeared to be

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

no indications and the QA Inspector accepted the above listed welds. See TL 6028 for this date for additional detail.





## **Summary of Conversations:**

As noted in the above body of this report.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer